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ORDINANCE NO. 49-897

AN ORDINANCE AMENDING SECTIONS 4.A.080, 4.1.020, 4.1.110, 4.2.010, 4.2.070, 4.2.125, 4.2.170, 4.2.175 AND 4.2.220; DELETING SECTIONS 4.2.185 AND 4.2.190; CREATING SECTIONS 4.2.055, 4.2.205 AND 4.2.240; AND REPEALING THE ORIGINALS OF SECTIONS 4.A.080, 4.1.020, 4.1.110, 4.2.010, 4.2.070, 4.2.125, 4.2.170, 4.2.175, 4.2.185, 4.2.190 AND 4.2.220; OF THE WICHITA-SEDGWICK COUNTY UNIFIED BUILDING AND TRADE CODE.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF WICHITA, KANSAS:

SECTION 1.

SECTION 4.A.080. – Electrical inspectors – Appointments – Duties is hereby amended to read as follows:

"All electrical inspectors shall have had a minimum of five (5) years of practical experience in this field as a Journeyman or Master and hold a current electrical certificate and shall be duly appointed pursuant to the requirements set forth by the Director of the MABCD. Persons in the employ of the MABCD who are duly certified as residential combination inspectors or residential electrical inspectors by the International Conference of Building Officials or by the International Code Council shall also be qualified as electrical inspectors for one and two-family residential structures and their accessory structures. Each inspector shall be duly appointed pursuant to the requirements set forth by the Director of the MABCD."

SECTION 2.

SECTION 4.1.020 – Electricians' certificates – Application - Examination is hereby amended to read as follows:

"Applications for examination for a master electrician's certificate or a journeyman electrician's

certificate or a residential wireman electrician's certificate shall be made to the office of the MABCD. The fee for an examination for a master electrician, journeyman electrician or residential wireman electrician shall be established by the Director of the MABCD, to cover the administrative costs.

Applicants for master electrician examination shall provide written documented proof of having a valid journeyman electrician certificate for a minimum of two (2) years.

Applicants for journeyman electrician and residential wireman electrician shall provide written documented proof of at least two (2) years of field experience in the electrical construction industry. "Field experience" means working under the direct supervision of a person having a valid journeyman certificate or master certificate or attending an accredited electrical trade school. No more than one (1) year of the requirement may be satisfied by trade related schooling. Schooling shall consist of a minimum of 930 hours classroom training. Documented proof includes the following:

- (a) Letter written on company letterhead from employer(s) stating job description and dates of employment and signed by a person qualified in the electrical trade; and
- (b) Copy of a transcript or attendance record from an accredited electrical trade school.

The electrical examination will be administered in accordance with K.S.A. 12-1525 and amendments thereto, with a minimum passing score of seventy-five percent (75%)."

SECTION 3.

SECTION 4.1.110.—**Electrical permit required**—**Fees listed** is hereby amended to read as follows:

"It is unlawful for any person to do or cause to be done any electrical wiring for light, heat or power in or on any building or structure or on any premises in the MABCD jurisdiction without first obtaining a permit from the office of MABCD. Applications for permits shall be made on forms furnished by MABCD, duly executed and signed by a person properly authorized to obtain permits for the applicant. The application may be presented in person, by electronic media or by mail and accompanied by the fee as listed in Article 1.2 of this Code."

SECTION 4.

SECTION 4.2.010.— **Installation standards** is hereby amended to read as follows:

"All electrical installations made shall be in strict conformity with the provisions of this Code. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the standards as set forth and contained in the National Electrical Code, 2014 Edition including Informative Annex C (Conduit and Tubing Fill Tables), as published by the National Fire Protection Association as N.F.P.A. No. 70-2014, as presently constituted and as may be hereinafter amended, shall apply with the exception of Section 110.16; Section 110.24; Section 200.6(d); Section 210.4(b); Section 210.5(c)(1); Section 210.12; Section 210.52(c)(1) Exception; Section 230.24(A) Exception No. 5; Section 230.40; Section 250.68(a) Exception No. 2; Section 300.4(H); Section 300.11(a)(2); Section 314.28; Section 334.10; Section 334.12(a)(1); Section 334.40(b); Section 334.80; Section 410.64; Section 430.22(G)(1); Section 430.22(G)(2); Section 514.11(A); Section 590.4(D); Section 590.6(B)(2); and Section 680.8; of such publication. Said N.F.P.A. No. 70-2014, was adopted by the National Fire Protection Association at its 2013 June Technical Session and approved as an American National Standard on August 21, 2013. By this publication, all provisions of such publication, with noted exceptions, are adopted by reference and made a part of this Code, and this Section as though fully set forth herein."

SECTION 5.

SECTION 4.2.055.— **Feeder or Branch circuit disconnect location** is hereby created to read as follows:

"Article 225.32 of the National Electrical Code (NEC) shall be amended to read:

The disconnecting means shall be installed either inside or outside of the building or structure served or where the conductors pass through the building or structure. The disconnecting means, if installed on the exterior of the building or structure, shall be at a readily accessible location nearest the point of entrance of the conductors. The disconnecting means, if installed inside the building or structure, shall be at a readily accessible location and located so the total length of conductor shall not be extended more than fifteen (15) feet inside of the building or structure. For the purposes of this section, the requirements of 230.6 shall be utilized.

National Electric Code exceptions permitted."

SECTION 6.

SECTION 4.2.070.— **Conductor requirements** is hereby amended to read as follows:

"A. Commercial and Industrial.

(1) *Type*. All commercial and industrial wiring conductors rated two hundred (200) amperes or less, including all service conductors required to be installed by the licensed electrical contractor, shall be copper. For parallel conductors, each individual conductor of a parallel set shall meet the requirements of this section. Parallel conductors are not to be considered a single conductor.

Exception. Feeder circuit and branch circuit conductors rated one hundred (100) amperes or more, may be aluminum or copper-clad aluminum, provided panelboards or disconnect switches served by such circuits are marked by the manufacturer as being suitable for aluminum or copper-clad aluminum termination.

(2) Minimum Size. The minimum size conductors shall be No. 12 AWG copper, except

smaller sizes will be acceptable for control wiring.

B. Residential.

All residential and accessory building wiring conductors less than ninety (90) amperes shall be copper.

Note: Grounding conductors installed in the same raceway or cable with the above listed aluminum conductors may be allowed to be aluminum when sized per Article 250 of the currently adopted National Electrical Code."

SECTION 7.

SECTION 4.2.125.— **Type NM, NMC and NMS cable ampacity** is hereby amended to read as follows:

"The ampacity of Types NM, NMC, and NMS cable shall be determined in accordance with Table 310.15(B)(16) of the National Electrical Code. The ampacity shall be in accordance with the 60°C (140°F) conductor temperature rating."

SECTION 8.

SECTION 4.2.170. – **Conduit bodies** is hereby amended to read as follows:

"Section 314.28 of the National Electrical Code shall be amended to read as follows: Boxes and conduit bodies trade size over two (2) inches used as pull or junction boxes shall comply with 314.28(A) through (E)."

SECTION 9.

SECTION 4.2.175.— **Arc-Fault Circuit Interrupter Protection** is hereby amended to read as follows:

"A listed arc-fault circuit interrupter shall be installed to provide protection as required in (A), (B) and (C).

(A) Dwelling Unit Bedrooms. All 120-volt, single phase, 15- and 20-ampere branch circuits

supplying outlets and devices installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter, combination type installed to provide protection of the branch circuit.

Exception: The location of the arc-fault circuit interrupter shall be permitted to be at other than the origination of the branch circuit in compliance with (a) and (b):

- (a) The arc-fault circuit interrupter installed within six (6) feet of the branch circuit overcurrent device as measured along the branch circuit conductors.
- (b) The circuit conductors between the branch circuit overcurrent device and the arc-fault circuit interrupter shall be installed in a metal raceway or a cable with a metallic sheath.
- (B) Branch Circuit Extensions or Modifications Dwelling Units. In any of the areas specified in 4.2.175(A) of this Code, where branch-circuit wiring is modified, replaced, or extended, the branch circuit shall be protected by one of the following:
 - (1) A listed combination-type AFCI located at the origin of the branch circuit, or
 - (2) A listed outlet branch-circuit type AFCI located at the first receptacle outlet of the existing branch circuit.

Exception: AFCI protection shall not be required where the extension of the existing conductors is not more than six (6) feet and does not include any additional outlets or devices.

(C) Dormitory Units. All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets and devices installed in dormitory unit bedrooms shall be protected by a listed arc-fault circuit interrupter meeting the requirements of 4.2.175(A) of this Code, including exceptions."

SECTION 10.

SECTION 4.2.185.— Receptacles in countertops not to be installed face-up is hereby repealed.

SECTION 11.

SECTION 4.2.190.— **Receptacles in wet locations** is hereby repealed.

SECTION 12.

SECTION 4.2.205.— Permitted use of Underground Residential Distribution (URD) cable is hereby created to read as follows:

"Underground Residential Distribution (URD) cable may be installed as an approved wiring method for outdoor use only, with the following restrictions.

- (a) Permitted for outdoor use only, installed direct buried or in a raceway.
- (b) Minimum size shall be #2 Aluminum.
- (c) The phase conductors and the neutral conductor shall be the same size.
- (d) The phase conductors and the neutral conductor insulation shall be identified as USE.
- (e) The Neutral conductor shall be properly identified per the National Electrical Code.
- (f) Grounding conductor, if needed, shall be a minimum of #2 aluminum or #6 copper and shall be insulated.
- (g) The ampacity of the conductors must comply with the values for the respective size and conductor material as listed in the seventy-five degree (75°) column of the Ampacity Tables of the latest adopted edition of the National Electrical Code."

SECTION 13.

SECTION 4.2.220.— **Conduit exposed to sunlight on rooftops** is hereby amended to read as follows:

"Where conductors or cables are installed in conduits with a horizontal length exceeding six (6)

feet and exposed to direct sunlight on or above rooftops, the adjustments shown in Table 310.15(B)(3)(c) of the National Electrical Code shall be added to the outdoor temperature to determine the applicable ambient temperature for application of the correction factors in Table 310.15(B)(16) and Table 310.15(B)(18) of the National Electrical Code."

SECTION 14.

SECTION 4.2.240.— Listing of Signs. 2014 NEC Article 600.3 is hereby created to read as follows:

"Effective January 1, 2016. All fixed, mobile, or portable electric signs, section signs, outline lighting, and retrofit kits, regardless of voltage, shall be listed, provided with installation instructions, and installed in conformance with that listing, unless otherwise approved by special permission of the Code Official.

- (A) Field-Installed Skeleton Tubing. Field-installed skeleton tubing shall not be required to be listed where installed in conformance with this Code.
- **(B) Outline Lighting.** Outline lighting shall not be required to be listed as a system when it consists of listed luminaires wired in accordance with this Code and Chapter 3 of the 2014 National Electrical Code."

SECTION 15.

The originals of Sections 4.A.080, 4.1.020, 4.1.110, 4.2.010, 4.2.070, 4.2.125, 4.2.170, 4.2.175, 4.2.185, 4.2.190 and 4.2.220 are hereby repealed.

SECTION 16.

The Board of County Commissioners has approved the above changes on November 19, 2014.

SECTION 17.

This Ordinance shall be included in the Wichita-Sedgwick County Unified Building and Trade Code, and shall be effective upon its passage and publication of a summary of this Ordinance once in the official city paper, but no sooner than January 1, 2015.

PASSED by the governing body of the City of Wichita, Kansas, this 9th day of December, 2014.

CERTIFICATE

and correct copy of the original ordinance; that
_, 2014; that the record of the final vote on its
; and that the Ordinance or a summary
, 2014.
Karen Sublett, City Clerk